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10/540,712	06/14/2005	Matthias Meyer	72.101	2404

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EXAMINER	
BAISA, JOSELITO SASIS	

ART UNIT	PAPER NUMBER
2832	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/540,712	MEYER, MATTHIAS	
	Examiner	Art Unit	
	Joselito Baisa	2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1, 3-5, 9, 12-15 and 18-20* is/are rejected.

7)☒ Claim(s) *2, 6, 7, 8, 10, 11, 16 and 17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-5, 9, 12-15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloch et al. [6169345] in view of Bruno [5019737].

Bloch discloses a converter device 7 for converting the electrical current frequency and comprising a housing that surrounds the converter device, the housing comprising:

a converter receptacle that surrounds a board chamber **13** for the converter device,

a housing segment **17** that is connected to the converter receptacle, that is isolated from the converter receptacle that acts as a cooling area inside a separating wall **14** of the converter receptacle so as to form an air deflection area that acts as a cooling air duct.

Bloch disclose the instant claimed invention discussed above except for a fan that is suitable for conveying cooling air through the cooling air ducts, and

in the cooling area ,an external first annular profile and additional annular profiles that are oriented to one another in relation to the axis of the first annular profile in such a way that the annular profiles surround each other with a distance from one another, transverse to a main axial direction, so as to form at least two annular chambers that act as cooling air ducts,

wherein the annular profiles situated inside the first annular profile end with an axial spacing from the separating wall of the converter.

Bruno discloses a fan 7 that is suitable for conveying cooling air through the cooling air ducts 9, 10, and in the cooling area ,an external first annular profile 1 and additional annular profiles 2 that are

oriented to one another in relation to the axis of the first annular profile 1 in such a way that the annular profiles surround each other with a distance from one another, transverse to a main axial direction, so as to form at least two annular chambers that act as cooling air ducts,

wherein the annular profiles situated inside the first annular profile end with an axial spacing from the separating wall [Col. 2, Lines 24-30, Figure 1].

It would have been obvious to one having ordinary skill in the art at the time of the invention to have a fan that is suitable for conveying cooling air through the cooling air ducts, and in the cooling area ,an external first annular profile and additional annular profiles that are oriented to one another in relation to the axis of the first annular profile as taught by Bruno to the structure of Bloch.

The motivation would have been for cooling purpose [Col. 1, Lines 48-60].

Regarding claim 3, Bloch discloses the converter receptacle and the cooling area are coupled with one another thermally by a separating wall **14** [Col. 4, Lines 39-44, Figure 1].

Regarding claim 4, Bruno discloses fan **7** is situated inside the first annular profile **1** coaxial thereto, in such a way that it is suited to suction a cooling air stream via one of the annular chambers 9, 10 and to guide this air stream past at least a part of the separating wall in the air deflection area, and to expel the air stream via a different annular chamber according to the counter flow principle [Col. 2, Lines 24-34, Figure 1].

Regarding claim 5, Bruno discloses a fan **7** is situated in the air deflection area [Col. 2, Lines 24-34, Figure 1].

Regarding claim 9, Bruno discloses the outer, first annular profile **1** engages with the adjacent annular profile **2** according to the tongue-groove principle [see Figure 4].

Regarding claim 12, Bruno discloses the annular profiles are extruded profiles [Col. 2, Lines 49-50].

Regarding claim 13, Bruno discloses the extruded profiles are aluminum extruded profiles that have been cut to fit [Col. 2, Lines 49-51].

Regarding claim 14, Bloch discloses the outer annular profile **17** is connected in centering fashion with the converter receptacle [see Figure 1].

Regarding claim 15, Bloch discloses the converter receptacle made up essentially of an aluminum cast part [Col. 3, Lines 37-47].

Regarding claim 18, Bloch discloses a cooling area is closed in the axial direction on the one hand by the separating wall **14** of the converter receptacle and on the other hand by a cover **33** that is provided with air passage openings [Col. 4, Lines 14-15 and Col. 5, Lines 12-14, Figure 1]

Regarding claim 19, Bloch discloses the board chamber **13** is closed on the one hand by the separating wall **14** of the converter receptacle and on the other hand by a front plate **15** [Col. 4, Lines 21-25, Figure 1].

Regarding claim 20, Bloch discloses a converter board **10** housed in the board chamber **13** is encapsulated in a power module and is exchangeable [Col. 4, Lines 12-20, Figure 1].

Allowable Subject Matter

Claims 2 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reason for allowable subject matter:

Claim 2 recites, inter alia, *cooling chamber for accommodating an isolating transformer.*

Claim 6 recites, inter alia, *annular transformer chamber that is limited inwardly by a third annular profile.*

The references of record do not teach or suggest the aforementioned limitation, would it be obvious to modify those references to include such limitation.

Response to Argument

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Bloch discloses a converter device for converting the electrical current frequency and comprising a housing that surrounds the converter device, the housing comprises a converter receptacle that surrounds a board chamber for the converter device, a housing segment that is connected to the converter receptacle, that is isolated from the converter receptacle that acts as a cooling area inside a separating wall of the converter receptacle so as to form an air deflection area that acts as a cooling air duct.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joselito Baisa whose telephone number is (571) 272-7132. The examiner can normally be reached on M-F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joselito Baisa
Examiner
Art Unit 2832

jsb

ELUM EMDO
SUPERVISORY PATENT EXAMINER
04/27/07